UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

03/16/2004

EXAMINER

DESTA, ELIAS

ART UNIT

PAPER NUMBER

2857

DATE MAILED: 03/16/2004

M/S 50-LAW P.O. BOX 500 **BEAVERTON, OR 97077**

THOMAS F. LENIHAN TEKTRONIX, INC.

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/008 938	11/08/2001	John J. Pickerd	7136-US	4805

TITLE OF INVENTION: GATE COMPARATOR

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$300	\$1630	06/16/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- ☐ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (703) 746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)

7590

03/16/2004

THOMAS F. LENIHAN TEKTRONIX, INC. M/S 50-LAW P.O. BOX 500 BEAVERTON, OR 97077 Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO, on the date indicated below.

(Depositor's name	
(Signature	
(Date	

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/008,938	11/08/2001	John J. Pickerd	7136-US	4805

TITLE OF INVENTION: GATE COMPARATOR

APPLN. TYPE	SMALL ENTITY	ISSUE FI	E	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional NO \$1330			\$300	\$1630	06/16/2004		
EXAMINER		ART UNIT		CLASS-SUBCLASS]		
DESTA, ELIAS 2				702-071000			
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).				nting on the patent front page, up to 3 registered patent a	ttorneys or 1		
☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.				agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or 2			
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.				

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or category		individual undividual	corporation or other private group entity	governmen		
4a. The following fee(s) are enclosed:	4b. Payment of Fee(s):					
☐ Issue Fee	☐ A check in the am	☐ A check in the amount of the fee(s) is enclosed.				
☐ Publication Fee	Payment by credit	☐ Payment by credit card. Form PTO-2038 is attached.				
☐ Advance Order - # of Copies	☐ The Director is h Deposit Account Nu		by charge the required fee(s), or credit and (enclose an extra copy of this	y overpayment, to s form).		
Director for Patents is requested to apply the Issue Fee	and Publication Fee (if any) or to re-apply	any previously p	oaid issue fee to the application identified ab	ove.		
(Authorized Signature)	(Date)					
NOTE; The Issue Fee and Publication Fee (if requother than the applicant; a registered attorney or a interest as shown by the records of the United States	nired) will not be accepted from anyone agent; or the assignee or other party in Patent and Trademark Office.					
This collection of information is required by 37 CF obtain or retain a benefit by the public which is to application. Confidentiality is governed by 35 U.S.C. estimated to take 12 minutes to complete, including completed application form to the USPTO. Time verse. Any comments on the amount of time you suggestions for reducing this burden, should be sen Patent and Trademark Office, U.S. Department 22313-1450. DO NOT SEND FEES OR COMPLED TO: Commissioner for Patents, Alexandria, V	file (and by the USPTO to process) an . 122 and 37 CFR 1.14. This collection is gathering, preparing, and submitting the will vary depending upon the individual require to complete this form and/or to the Chief Information Officer, U.S. of Commerce, Alexandria, Virginia LETED FORMS TO THIS ADDRESS.					
Under the Paperwork Reduction Act of 1995, no collection of information unless it displays a valid Of	persons are required to respond to a MB control number.					



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FIL	ING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/008,938 11/08/2001		1/08/2001	John J. Pickerd	7136-US	4805
7590 03/16/2004		EXAM	EXAMINER		
THOMAS F. I		DESTA	DESTA, ELIAS		
TEKTRONIX, I M/S 50-LAW	inc.			ART UNIT	PAPER NUMBER
P.O. BOX 500		2857			
BEAVERTON,	OR 97077		DATE MAILED: 03/16/2004		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 133 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 133 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

			- the					
	Application No.	Applicant(s)	40-					
Matica of Allawahilite	10/008,938	PICKERD ET AL.						
Notice of Allowability	Examiner	Art Unit						
	Elias Desta	2857						
The MAILING DATE of this communication appearance All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to	olication. If not include will be mailed in due	ed course. THIS					
. This communication is responsive to <u>amendment filed on September 22, 2003</u> .								
2. The allowed claim(s) is/are <u>18-30</u> .								
3. \boxtimes The drawings filed on <u>08 November 2001</u> are accepted by	the Examiner.							
 4. ☐ Acknowledgment is made of a claim for foreign priority unall All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have 2. ☐ Certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submin INFORMAL PATENT APPLICATION (PTO-152) which give (a) ☐ including changes required by the Notice of Draftspers 1) ☐ hereto or 2) ☐ to Paper No./Mail Date (b) ☐ including changes required by the attached Examiner' Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the composition of the deposition of the de	e been received. e been received in Application No cuments have been received in this of this communication to file a reply MENT of this application. ditted. Note the attached EXAMINER es reason(s) why the oath or declara est be submitted. eson's Patent Drawing Review (PTO s Amendment / Comment or in the Comment or in the Comment of the drawing the header according to 37 CFR 1.121(estit of BIOLOGICAL MATERIAL researce).	national stage applical complying with the red'S AMENDMENT or Nation is deficient. 948) attached office action of the dol. must be submitted.	quirements IOTICE OF					
Attachment(s) 1. Notice of References Cited (PTO-892) 2. Notice of Draftperson's Patent Drawing Review (PTO-948) 3. Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	5. Notice of Informal F 6. Interview Summary Paper No./Mail Da 7. Examiner's Amenda 8. Examiner's Statema 9. Other	(PTO-413), te ment/Comment						

Art Unit: 2857

Detailed Action

Drawing

1. Applicant's request for reconsideration of objection of Figs. 3, 3A and 4B of the instant application is persuasive and, therefore, the finality of that action is withdrawn.

Specification

2. The Examiner accepts the amended specification for minor informalities.

Allowance

- 3. The following is an examiner's statement of reasons for allowance:
- <u>In reference to claim 18</u>: <u>Pieper et al.</u> (U.S. Patent 5,371,851) teaches a test and measurement instrument (see <u>Pieper et al.</u>, Abstract). The instrument includes:
 - A circuitry for entering parameters to be used to detect violations of predetermined parameters (see *Pieper et al.*, Fig. 2, members 134 and 136);
 - ➤ A data acquisition unit for acquiring a signal on the first channel (see <u>Pieper et al.</u>, Fig. 1, members 110, 116, and 108);
 - > A processing circuitry for processing the signal from the first channel (see *Pieper et al.*, Fig. 1, member 106);

Application/Control Number: 10/008,938

Art Unit: 2857

➤ A display circuitry for displaying a waveform representation of the signal from the first channel (see *Pieper et al.*, Fig. 26);

Page 3

- ➤ A reference memory for storing the first reference waveform (see <u>Pieper et al.</u>, column 4, lines 36-40) because the it is inherent that the graphics display have to have a memory in order to retain the waveforms;
- ➤ Comparing circuitry for repeatedly comparing the stored first reference waveform to portions of the first signal for detecting the existence of one of the violations by moving the reference waveform along the signal in time (see *Pieper et al.*, column 19, lines 30-54); and
- ➤ Circuitry for alerting a user when one of the violations is detected (see <u>Pieper et al.</u>, column 22, line 54 to column 23, line 4).

However, <u>Pieper et al</u>. does not teach a gate comparator to enable a high-speed search for an anomaly or violation in a long record length data acquisition of a test.

Unlike *Pieper et al*. the claimed invention further includes:

- > Defining a plurality of gates with respect to the long record length data;
- ➤ Entering a mathematical comparison expression for comparing contents of reference memories;
- > Storing the portions of the long record length data in a reference memories;

Art Unit: 2857

> Executing the mathematical comparison expression to identify existence of violation;

> Scanning the long record length data acquisition by incrementing the positions of the gates in tandem.

The remaining claims are dependent upon claim 18 and contain further limitation

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elias Desta whose telephone number is (571)-272-2214. The examiner can normally be reached on M-Thu (8:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571)-272-2216. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-308-5841 for regular communications and (703)-308-5841 for After Final communications.

Art Unit: 2857

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-1782.

Elias Desta Examiner Art Unit 2857

-ed

March 1, 2004

MARC S. HOW SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2800

Application Number			 olicant(s) CKERD ET AL.	
TERMINAL DISCLAIMER] APPROVED	☐ DISAPPI	ROVED
Document Code - DISQ	-	This patent is subject to a Terminal		
INTERNAL DOCUMENT – DO NOT MAIL		Disclaimer	•	

U.S. Patent and Trademark Office